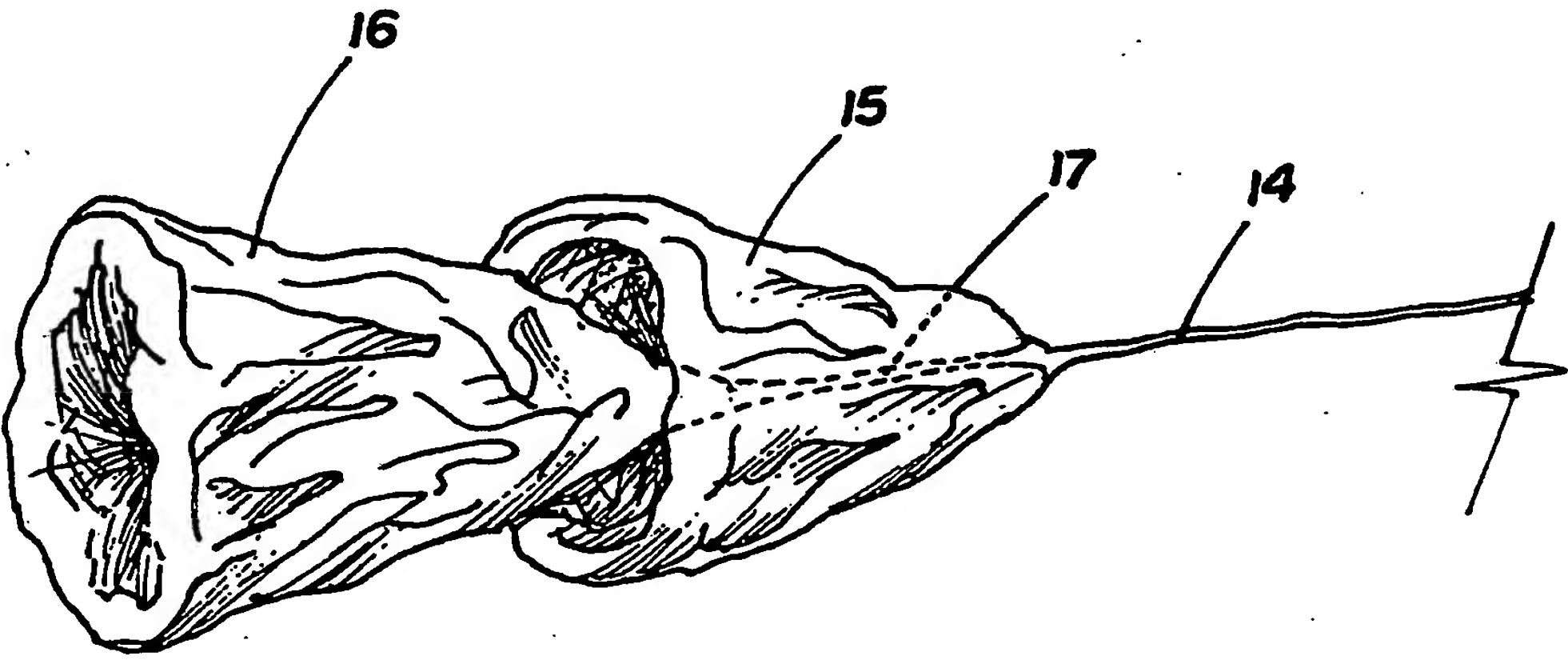




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<b>(21) International Application Number:</b> PCT/US93/04789 <b>(22) International Filing Date:</b> 22 April 1993 (22.04.93)  <b>(30) Priority data:</b> 07/874,513 27 April 1992 (27.04.92) US  <b>(60) Parent Application or Grant</b> <b>(63) Related by Continuation</b> US 07/874,513 (CIP) Filed on 27 April 1992 (27.04.92)  <b>(71)(72) Applicants and Inventors:</b> BROWN, Haydee [US/US]; 450 NE 146th Street, Miami, FL 33161 (US). ORTOLIVO, Thomas, V. [US/US]; 2211 NW 41st Avenue, Coconut Creek, FL 33063 (US).		<b>(74) Agent:</b> ZALLEN, Joseph; 2455 East Sunrise Boulevard, Suite 802, Fort Lauderdale, FL 33304 (US).  <b>(81) Designated States:</b> AU, CA, JP, US, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
<b>(54) Title:</b> PALLIATIVE CONTROLLING DEVICE FOR INCONTINENCE    <b>(57) Abstract</b>  An incontinent controlling device for bowel movement comprising two or more compacted absorbent pads (15, 16) connected together by short lines (17). The pads are inserted into the rectum where they swell and substantially fill the portion of the rectum they occupy and hold back accumulated feces until a removal line (14) is pulled.		

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## PALLIATIVE CONTROLLING DEVICE FOR INCONTINENCE

Background of Invention

This invention is a continuation-in-part of U.S. sn. 07/874,513 filed April 27, 1992. This invention relates generally to incontinence, and in particular to assisting individuals who are unable to properly control the elimination of their bowels.

One object of this invention is to provide means for holding feces in the intestinal canal until it is desirable or feasible to permit elimination.

Other objects and advantages of this invention will be apparent from the description and claims which follow taken together with the appended drawings.

Summary of Invention

This invention comprises generally inserting an assembly of absorbent pads into the rectum thus blocking elimination of feces. The assembly comprises two or more absorbent pads, preferably cup-shaped, connected together by a flexible line such as nylon. The inner pads are preferably in nesting relation with the outer pads and are connected in sequence by short flexible lines, as for example, one-half inch in length. The most outer pad has an accessible removal line. The materials which can be used are typically expandable, absorbent materials such as unwoven cotton or rayon, with a typical expanded diameter of two inches. In application the pad assembly, preferably lubricated, can be inserted directly.

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Also, the assembly can be loaded into a device similar to those used for insertion of tampons. An example of such a tampon inserter device is U.S. Patent 3,895,634.

Brief Description of Drawings

Fig. 1 is a view of the pad assembly of this invention encased in a sterile container having a window.

Fig. 2 is a view of the pad assembly of Fig. 1 after removal from the container.

Fig. 3 is a side view with partial cutaway of the pad assembly loaded into an inserting device.

Figs. 4 and 5 indicate the invention diagrammatically after insertion into the rectum, but for purposes of clarity the rectum is not shown.

Fig. 4 is a side view wherein the inserting device has been inserted into the rectum and partially removed showing two connected absorbent pads.

Fig. 5 shows the final position of the pads in the rectum.

Fig. 6 is a diagrammatic view of another embodiment of this invention after insertion into the rectum, but for purposes of clarity the rectum is shown in phantom.

Fig. 7 is a diagrammatic view similar to Fig. 6 wherein the pads have been turned inside-out by pulling on the removal line.

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Specific Example of Invention

Referring now to Figs. 1, 2, and 5 in the drawings, the embodiment illustrated therein comprises a pad assembly in an insertion device similar to the tampon insertion device described in U.S. Patent 3,895,634. A sterile container 18 is shown having a window 19. Housed in the container is a pad assembly consisting of compressed, expandable, absorbent pads 15 and 16 connected together by a nylon line 17 approximately one-half inch in diameter. When expanded by the moisture in the intestinal canal, the pads are approximately two inches in diameter. A nylon removal line 14 is attached to the base of the outer or pad 15. The pads serve to retain the feces in the rectum. A plurality of pads is needed because a single pad does not give enough protection against leakage. Pulling of the removal line 14 allows the pads to be removed and thus permits the flow of feces out of the rectum.

Referring now to Figs. 3, 4, and 5, an inserting member 11 is shown whose dimension is of the order of one-half inch or so. Spaced in the inserting member in compact form are the expandable absorbent pads 15 and 16. The inserting member has an insertion tip 12 which has triangular shaped segments 12a to permit the compacted pads 15 and 16 to be released for expansion in the intestinal canal after the assembly has been inserted into the rectum.

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In another embodiment of this invention, an inverted cup-like pad assembly in compressed form is inserted into the rectum either directly or by means similar to the preceding embodiment. After insertion the pads expand so that their edges cling to the walls of the rectum. Fig. 6 illustrates the expanded pads 21 and 22 clinging to the rectum 20 (shown in phantom) after the pads in compressed form had been inserted into the rectum in the direction indicated by arrow A. The pad 21 has a firm anchor 21a connected to a short nylon line 23 whose other end is connected to another firm anchor 22a. An elongated nylon line 24 is also connected to anchor 22a and has a portion outside the rectum.

After the pads have been inserted and expanded, line 24 is pulled in the direction indicated by arrow B, causing the pads to invert into the position illustrated in Fig. 7

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Claims

1. An incontinent controlling assembly for bowel movement comprising a plurality of compressed, expandable, absorbent pads connected together by short lines and having an externally accessible line for removal; said pads when expanded being cup-shaped; said pads being configured for insertion into the rectum of a person so as to expand with the moisture therein and substantially fill the portion of the rectum they occupy and hold back accumulated feces until the externally assembly line is pulled.

2. An incontinent controlling assembly for bowel movement configured for insertion into the rectum of a person; said device comprising a plurality of compressed, expandable, absorbent pads connected together by short lines and having an externally accessible removal line whose end extends out of the rectum; said pads being characterized as expanding in the rectum to result in a series of cup-shaped members which hold back accumulated feces until the removal line is pulled; each said cup-shaped member except the lowest, having a portion of its bottom within the volume of the next lower cup-shaped member.

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3. A method for controlling bowel movement in the rectum of a person who has intestinal incontinence, said method comprising the steps of: (1) inserting into the rectum an assembly comprising a plurality of compressed, expandable, cup-shaped, absorbent pads connected together by short lines and having a line whose end extends out of the rectum so as to be externally accessible; and (2) pulling on said removal line to remove the assembly with its accumulated feces from the rectum; said pads being so characterized that upon expansion they form nesting, cup-shaped members.

4. The method of Claim 3 wherein the assembly is inserted so that the cup-shaped members are facing upwardly upon expansion.

5. The method of Claim 3 wherein the assembly is inserted so that the cup-shaped members are facing downwardly upon expansion, and the removal line is pulled to invert the cup-shaped members so that they face upwardly.



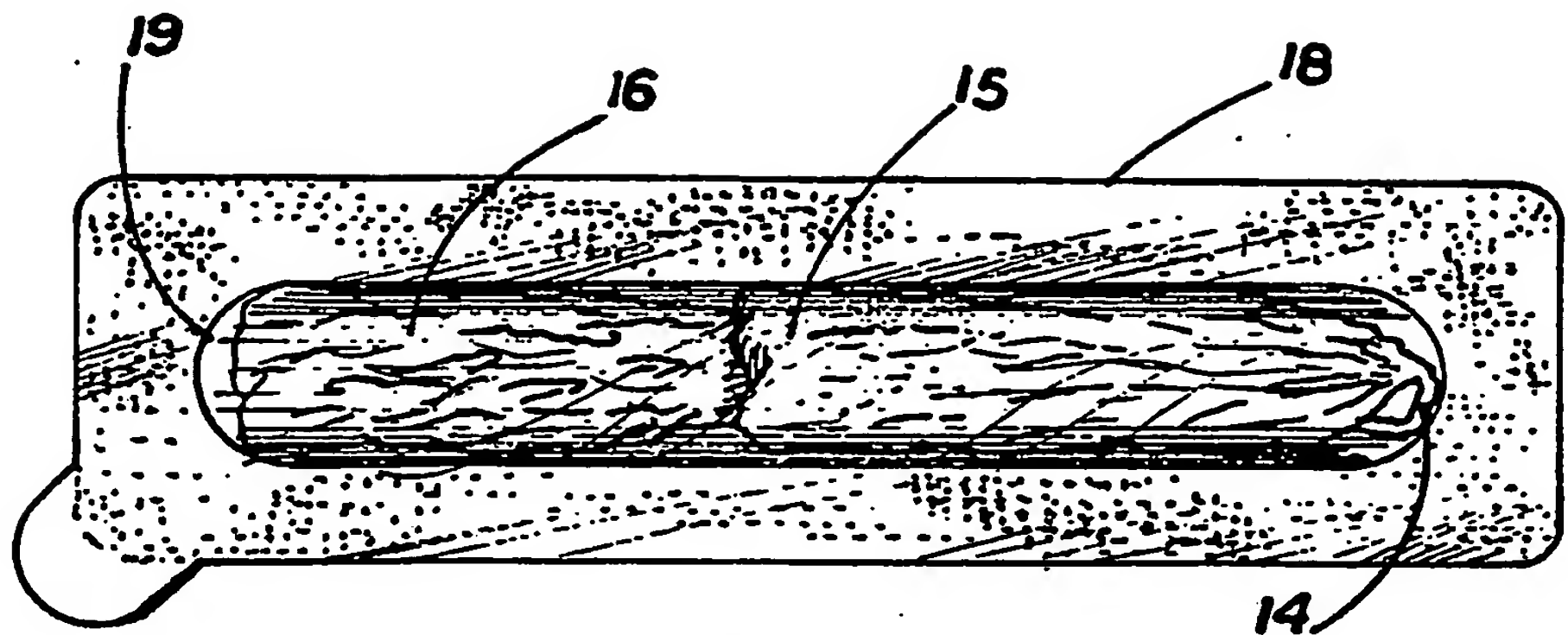


FIG. 1

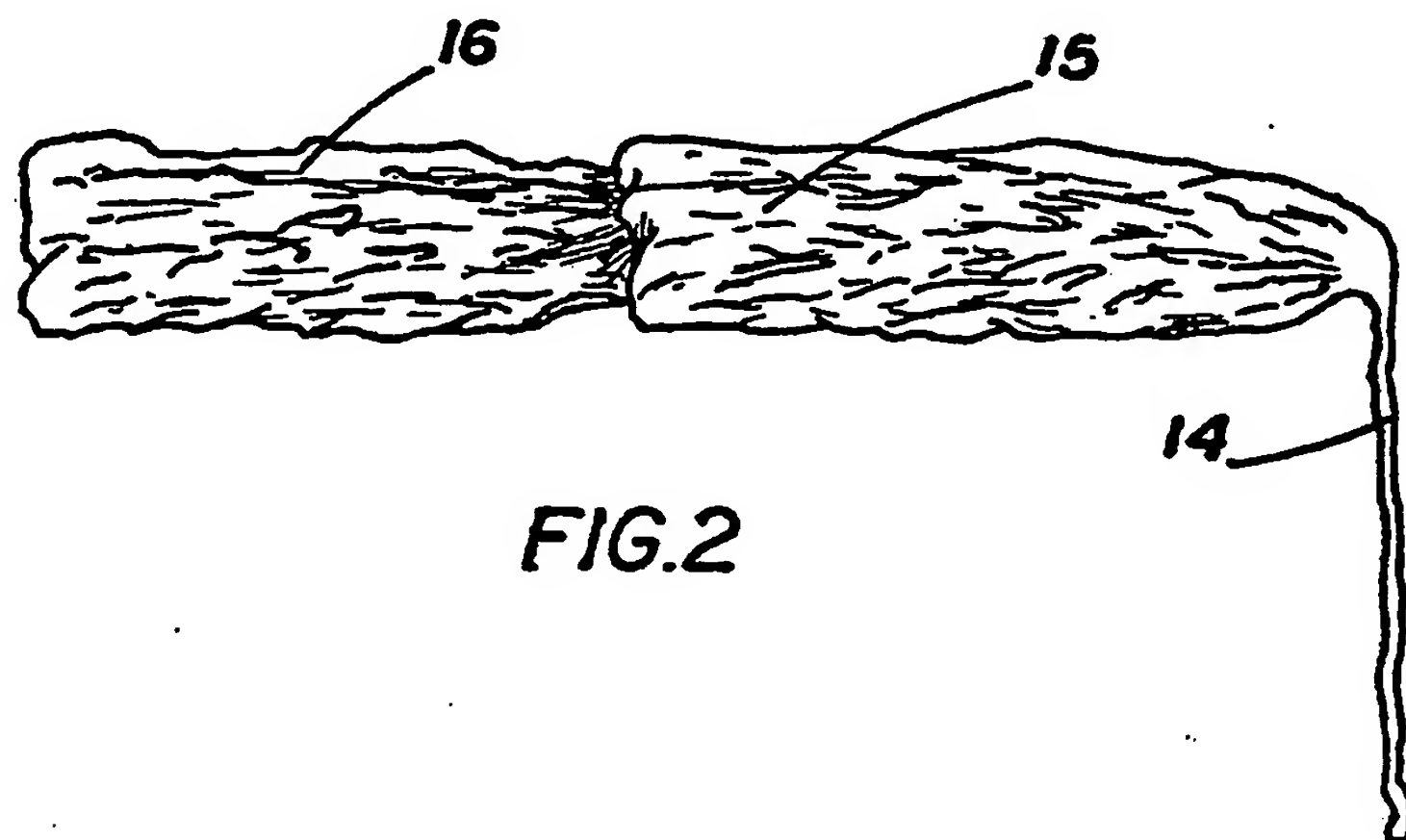
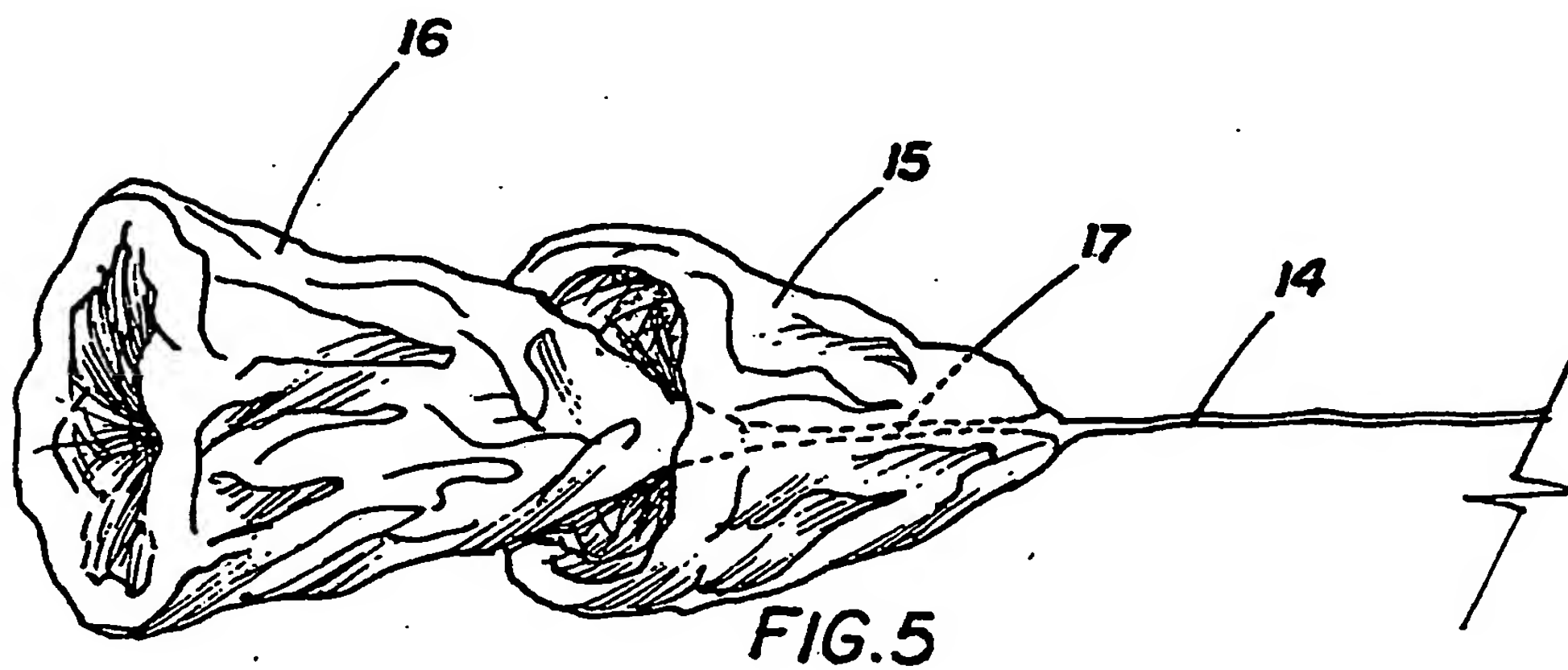
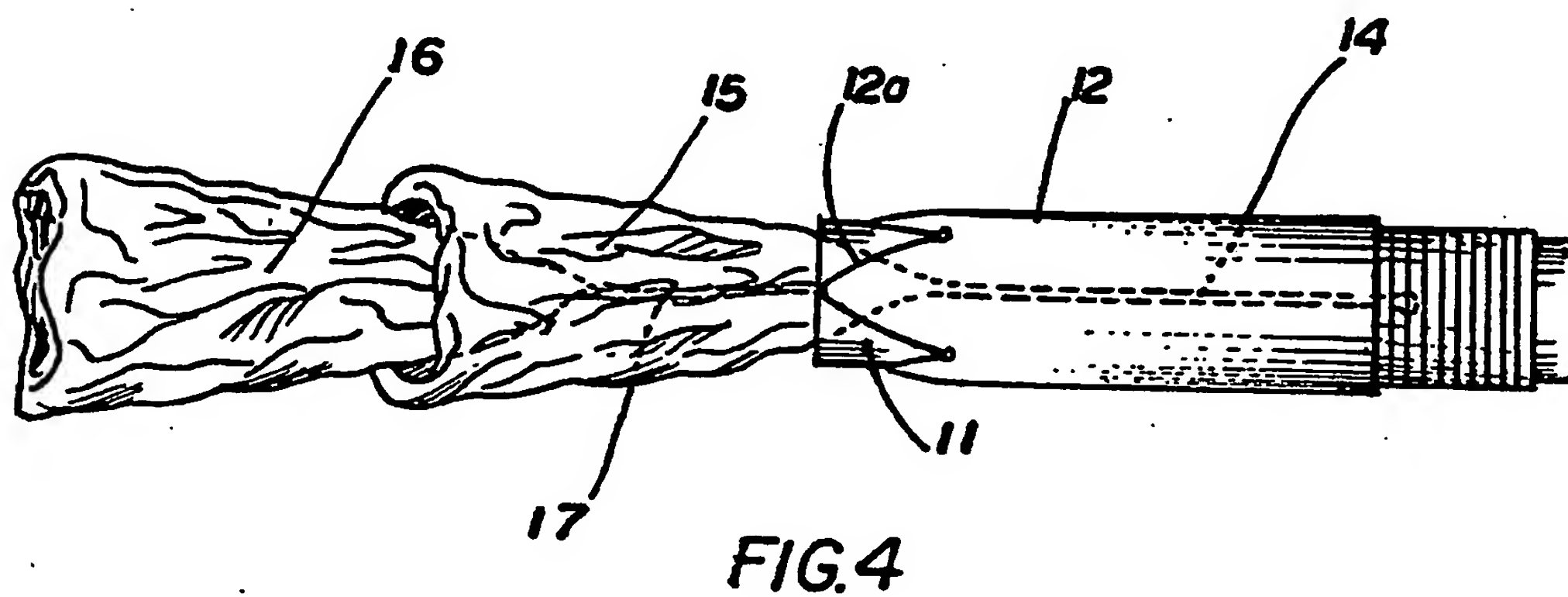
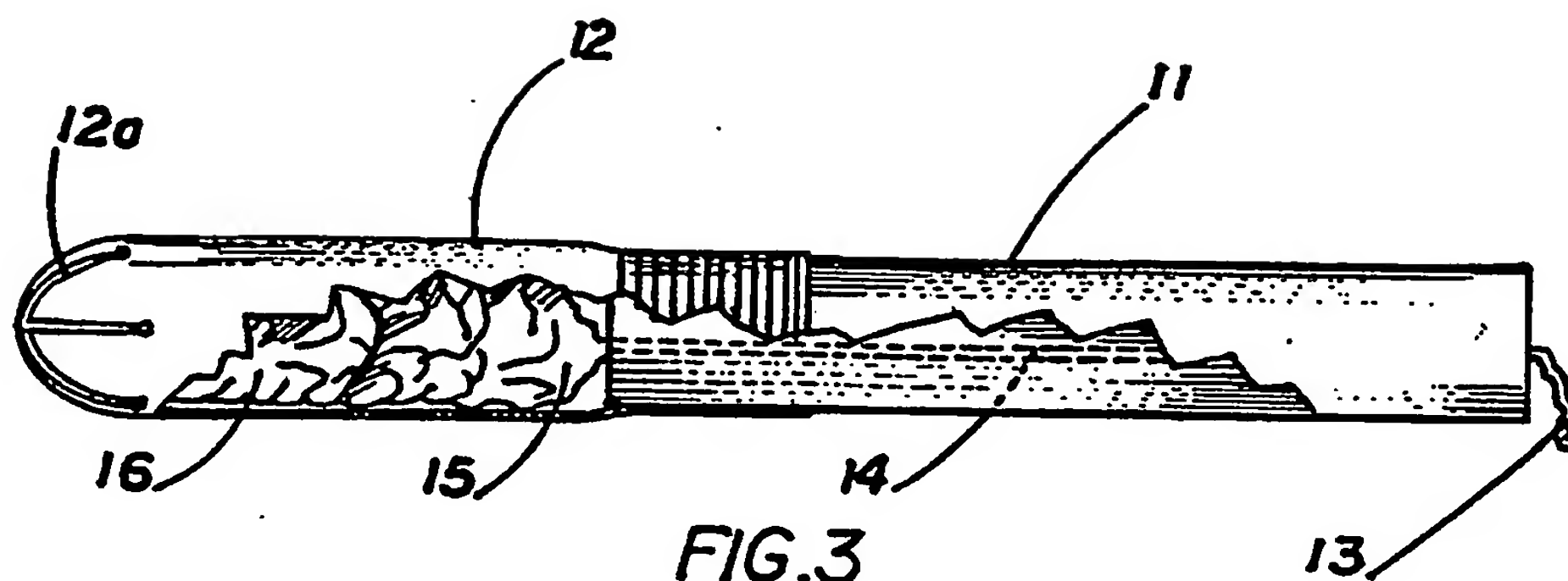
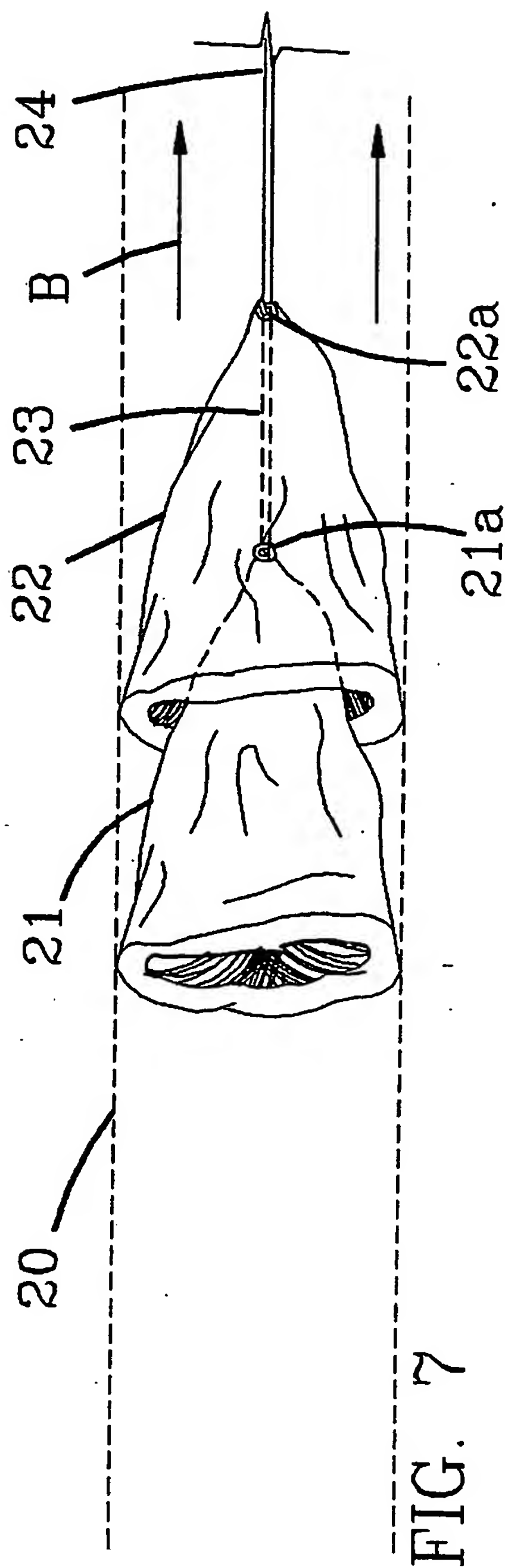
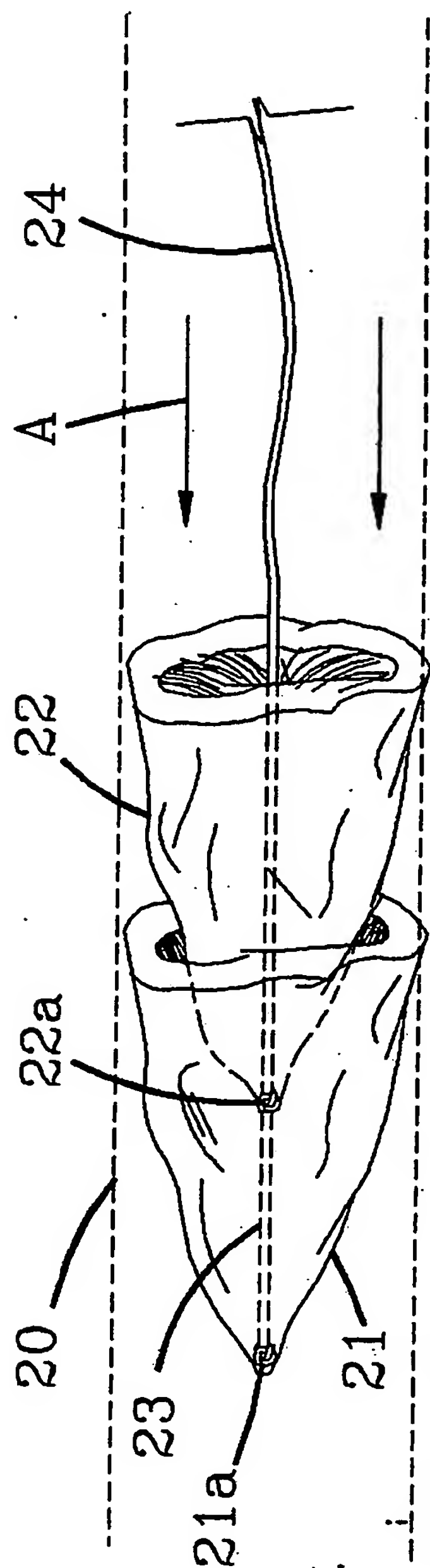


FIG. 2





## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US93/04789

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(5) :A61F 13/15

US CL :604/385.1

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 604/385.1; 600/29-32; 128/DIG25; 604/358, 327, 328, 904

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US, A, 3,965,905 (Schoenhoe et al.) 29 June 1976 , see figure 3 and body of patent.	1-5
Y	US, A, 3,794,029 (Dulle) 26 February 1974, see figure 1 and abstract.	1-5
Y	US, A, 4,209,009 (Hennig) 24 June 1980, see entire reference.	3-5



Further documents are listed in the continuation of Box C.



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31 July 1993

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